The Examiner has withdrawn claims 9-17 from consideration, because he believes that "[t]hey are in combination-subcombination relationship" in which "the combination does not need the steps of the subcombination." Office Action at page 2. Applicants respectfully request the Examiner to reconsider the restriction requirement for the reasons set forth below.

Claims 1-8 are rejected under 35 U.S.C. § 112, first paragraph, for the reason set forth at page 3 of the Office Action. Applicants respectfully traverse the Section 112, first paragraph, rejection based on the arguments set forth below.

The drawings are objected to under 37 CFR 1.83(a), because the Examiner believes that the current drawings do not illustrate "the reduction in length of one layer being larger than the reduction in length of a prior layer." As discussed below, Applicants respectfully submit that the drawings as filed adequately illustrate every feature of the invention as presently claimed.

The Examiner has indicated that claims 1-8 recite subject matter allowable over the prior art, but nonetheless rejected under 35 U.S.C. § 112(1).

Reconsideration Of Restriction Requirement

MPEP § 803 states that "an application may be required to be restricted to one of two or more claimed inventions only if they are able to support separate patents and they are either independent or distinct." The MPEP further mandates that if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits. Accordingly, any requirement for restriction must make a prima facie showing that a serious burden exists to examining claims 9-17.

In the Office Action, the Examiner makes no showing that there would be a serious burden to examining claims 9-17. The mere allegations that claims 1-8 "do not require any steps of depositing," and that claims 9-17 "do not require any steps of reducing (cutting) layers," even if assumed to be true (and they are not), do not support a showing of a serious burden.

Indeed, a comparison of claims 1-8 with claims 9-17 reveals that all the claims primarily relate to the method of manufacturing a preform having a step or cylindrical-like segment (e.g., 10' in Fig. 2). Clearly, these claims are sufficiently related, such that the Examiner is required to search the same technical fields, whether or not the two sets of claims are presented in the same or separate application. That is, the claims are so inextricably interrelated that either group of claims cannot be comprehensively examined without also searching those areas in which the other group is classified.

Furthermore, the Examiner's allegations that claims 1-8 "are directed to the invention of figure 3, i.e., the reduction (cutting) in length of the already formed layers" and "do not require any steps of depositing," and that claims 9-17 "do not require any steps of reducing (cutting) layers" are simply not correct. Claim 1 recites a "method of building up an optical fiber preform" by successively passing the preform relative to the torch, and wherein "certain ones of the passes carried out with material being supplied and certain other ones of the passes being carried out without material being supplied, so that each successive pass leads to a new layer of material being deposited on the preform when material is supplied and to the most recent layer deposited being glazed when material is not supplied . . ." Clearly, therefore, claim 1 and dependent claims 2-8 do require steps of depositing material onto the preform to build the

preform. Furthermore, the step of "interposing a one-ended reduction in the length of at least one layer," as recited in claim 1, is not a cutting step. Rather, as clear from the claim language, and when properly construed in light of Applicants' Specification, the reduction in length of a layer is obtained by shortening the pass of the preform when depositing a layer. See, e.g., Applicants' Specification at page 7, line 26 to page 8, line 17. There is no cutting of the layer at this stage.

With respect to claim 9, the Examiner is correct that the claim does not recite a step of "cutting" a layer. However, neither does claim 1 as explained above. That is, both claims are directed to a method of manufacturing a preform by depositing layers, but do not recite a step of cutting the preform.

The Examiner alleges an alternative reason for restricting out claims 9-17, stating that

> As a further (or alternative) reason, claim 9 requires that the layers extend from the first plane to another plane. Claim 1 has the ends decreasing uniformly (line 19). If the layers extend from plane to plane, then the composite must have planar ends. This is mutually exclusive of a species where ends which decrease uniformly. Since the decreasing ends have already been presented, such is a constructive election of a decreasing ended preform - which is mutually exclusive of the invention of claims 9-17.

Office Action at page 2. This reasoning finds no support in the claim language.

In particular, contrary to the Examiner's assertion, claim 9 does not recite an embodiment that is mutually exclusive of that recited in claim 1. While it is true that claim 1 recites that "a portion of each of the end-pieces decreases uniformly towards the ends," this recitation does not exclude the fact that there is a layer having a one ended reduction in the length interposed

therein, and which forms the segment 10' on the preform illustrated in Fig. 2. See, also Applicants' Specification at page 8, line 3 to page 9, line 2.

Claim 9 also recites the method of manufacturing a preform so as to obtain the segment 10' or the like. In particular, claim 9 recites depositing successive layers that extend between lengths defined by imaginary planes. That is, the recited planes are not physical structures (just as an axis for a cylinder recited in a claim is not a physical structure), but are used as a reference to delimit the relative lengths of the successive layers deposited on the preform. Therefore, while claim 1 may be construed to require that "a portion of each of the end-pieces decreases uniformly towards the ends," claim 9 is not so limited. Nevertheless, the claims do not recite mutually exclusive features.

Moreover, while acquiescence in a restriction requirement and the attendant filing of a divisional application surely represent the "path of least resistance", the cumulative government filing, issue and maintenance fees alone involved in pursuing such course of action currently total almost $8000, which seems a high price to spare the Examiner from whatever additional search, if any, may be necessary.

In view of the foregoing, Applicant requests that the restriction requirement be withdrawn upon reconsideration, and that claims 9-17 be considered on the merits. In doing so, the Examiner is strongly encouraged to carefully reconsider his construction of the claims as described in the restriction requirement, which Applicants respectfully submit is not in agreement with their proper meaning. The Examiner is also strongly encouraged to telephone

the undersigned attorney directly at 703 663-7468, should the Examiner maintain that the claims are restrictable for the reasons of record.

Claim Rejection - 35 U.S.C. § 112(1)

In rejecting claims 1-8, the Examiner takes the position that

> Claims 1-8 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
>
> Claim 1 has been amended to require that "the one ended reduction in the length is greater than a reduction in length of an immediate prior layer from a second to the immediate prior layer." First it is noted there is no explicit support for this limitation. Second, it is clear from the drawings that each layer is no longer than any of the previous (prior) layers. Thus when a layer is cut (given a reduction in length) any layer below it (i.e. made prior to it) is also cut, but more of that prior layer is cut off. Since more of the prior layers is cut (reduced in length), the reduction in length of the prior layers is greater than the reduction length of a non-"prior" length. This is the opposite of what is now being claimed.

Office Action at page 3. Applicants respectfully disagree.

The Examiner's rejection makes clear that he has simply misconstrued the claim in a way that is not reasonable and not in agreement with Applicants' Specification. Indeed, when properly construed, claim 1 finds explicit support in the Specification.

The Examiner bases his rejection on a claim construction that appears to require cutting a layer. However, claim 1 makes no mention of a cutting operation. Rather, claim 1 is directed to building up the preform in a certain manner prior to the cleaving step illustrated in Fig. 3.

Specifically, as explained above in connection with the traversal of the restriction requirement, claim 1 is directed to the formation of a preform having the segment 10' illustrated in Fig. 2.

Figure 2 and the corresponding discussion at page 8 of Applicants' Specification describe a method in which the right side of the preform 1' expands from the end piece 6b' to a diameter D1 by successively adding layers of material to the preform, wherein each successive layer is shorter in the axial direction than the previous layer so as to form the expanding conical section at the far right end. Next, a one-ended reduction in layer length is interposed and set to a value L1 to form the cylindrical segment 10'. Afterwards, additional successive layers are added to enlarge the preform to its largest diameter.

Therefore, as recited in claim 1, the one ended reduction in the length L1 is greater than the previous successive reduction in lengths of the prior layers that formed the expanding conical section at the far right end, and for which there is explicit support in the application as originally filed.

Again, the Examiner is strongly encouraged to carefully reconsider his construction of the claims and to telephone the undersigned attorney directly at (202) 663-7468, should the Examiner maintain that the claims are rejected under 35 U.S.C. § 112(1) for the reasons set forth in the present Office Action.

Drawings

Applicants respectfully submit that the drawings show "the reduction in length of one layer being larger than the reduction in length of a prior layer" as already discussed above with respect to the Section 112(1) rejection. Accordingly, this objection is believed to be traversed.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

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